

IN THE SPECIFICATION:

Please amend paragraph number [0004] as follows:

[0004] A conventional lead frame or LOC lead frame may serve other functions. That is, it may assist in heat dissipation during manufacture, increase the structural strength of the assembled semiconductor device as well as provide convenient locations to make electrical connections.

Please amend paragraph number [0006] as follows:

[0006] Typically, in attaching an LOC lead frame to a semiconductor device, a ~~double-coated~~ double-coated adhesive tape is applied between the active surface of the semiconductor device and the lead frame. The adhesive tape is typically an insulating carrier with a polymer adhesive on both sides to mechanically interconnect the lead frame and the semiconductor device. The tape composition and the amount of polymer adhesive used on the tape varies with the size of the semiconductor device. It is desired to use the least amount of adhesively coated tape to attach a semiconductor device to a lead frame to attempt to minimize problems. Too much polymer adhesive added to the tape can cause a coefficient of thermal expansion mismatch between the lead frame, the polymer adhesive and the semiconductor device which can contribute to the failure of the packaged device. Reducing the size of the tape to enhance performance may involve reprocessing the tape at some increased cost and at some difficulty for the smaller sizes. U.S. Patent 5,548,160 (Corbett et al.)

Please amend paragraph number [0010] as follows:

[0010] A non-conductive polymer adhesive is selected from the group of adhesives that is tacky and compliant at room temperature, easily applied to a substrate, such as through the use of a stencil, and easily cured to a predetermined degree. The non-conductive polymer is ~~applied~~, applied at room temperature, either to the lower surface of the lead fingers of the lead frame or to portions of the active surface of the semiconductor device for compression therebetween. The

lead fingers are connected by wire bonds to the bond pads on the active surface of the semiconductor device.

Please amend paragraph number [0015] as follows:

[0015] In an alternate configuration, a stencil is provided with the adhesive, at room temperature, applied to either a surface of each lead finger of the lead ~~fingers~~ frame or portions of the active surface of the semiconductor device. The lead frame and the semiconductor device are thereafter positioned relative to each other and urged together to effect attachment and electrical connection, if desired.

Please amend paragraph number [0019] as follows:

[0019] FIG. 3 is a ~~cross-sectional~~ cross-sectional depiction of portions of a semiconductor device of the invention; and

Please amend paragraph number [0020] as follows:

[0020] FIG. 4 is a ~~cross-sectional~~ cross-sectional depiction of portions of a semiconductor device assembly of the invention with the semiconductor device and the lead frame in contact.

Please amend paragraph number [0021] as follows:

[0021] Referring to drawing FIG. 1, a semiconductor device assembly 10 includes a lead frame 12 having a plurality of lead fingers 14 thereon. The lead frame 12 is one of a plurality that is connected in end-to-end fashion, thereby forming a strip or roll of lead frames. That is, lead frame 12 is positioned between a preceding frame 16 and a following frame 18. The lead frame 12 as well as the preceding frame 16 and following frame 18 are driven or moved through a manufacturing environment by an appropriate drive or indexing system that engages the apertures 20 formed in the opposite ~~edges, or rails,~~ edges or rails 22 and 24. At a convenient time, the lead frames 12, 16 and 18 are separated one from the other and the opposite ~~edges, or~~

~~rails, edges or rails~~ 22 and 24 are removed so that each frame with a semiconductor device attached thereto becomes a separate and useable semiconductor device assembly.

Please amend paragraph number [0026] as follows:

[0026] As illustrated in drawing FIG. 2, the lead frame 60 is the same as lead frame 12. The lead frame 60 is positioned to pass relative to a stencil 62. That is, a drive or indexing means (not shown) urges the lead frame 60 as well as the preceding frame 64 and the following frame 66 to move past the stencil 62. A source 67 of adhesive 68 is illustrated separate from the stencil 62 for clarity. In normal use, the stencil 62 is positioned so that adhesive 68 from the source 67 is urged through the apertures 70 of the stencil 62 (by, for example, a piston) and onto the underside or ~~attachment~~ attaching surface 72 of the lead frame 60. The stencil 62 may be configured with any desired pattern of apertures for deposition of adhesive 68 on an attaching surface 72 of the lead frame 60. Of course, the adhesive may also be deposited on the active surface 73 of the semiconductor device 76.

Please amend paragraph number [0032] as follows:

[0032] To manufacture the desired semiconductor devices, the user provides the necessary lead frames in ~~frame-by-frame~~ frame-by-frame sequence. Each lead frame has an attaching surface and connectors associated therewith. Semiconductor devices are also provided in a ~~piece-by-piece~~ piece-by-piece sequence, each to be attached to an appropriate lead frame. Each semiconductor device has bond pads thereon configured for electrical connection to the lead fingers of its respective lead frame.